HUB REVIEW FINDINGS – OAKLAND INTERNATIONAL AIRPORT

Date of Hub Review:
November 1, 2006

Participants:
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Existing Hub Conditions:
The Oakland International Airport (OAK) is comprised of two Terminals; Terminal 1 and 2. The Airport is served by a number of ground transportation connections at each Terminal including: the AirBART shuttle, AC Transit buses, taxi, and rental car services. The AirBART shuttle is a particularly important service providing between the Airport and the Coliseum/Oakland Airport BART Station for approximately 1,229,000[1] passengers annually. Presently, AirBART is operated with shuttle buses running at 10-minute headways during BART service hours. BART is pursuing the replacement of the buses with an automated guideway transit (AGT) system in the future.

AC Transit provides bus service to the Airport on two lines, Route 50 and All-Nighter Route 805. Route 50 connects the Airport to east Oakland and San Leandro at 15 minute frequencies between the hours of 5:30 AM and 8:30 PM, and 30 minute frequencies between 8:30 PM and 12:00 AM. All-Nighter service on Route 805 provides late-night service between the Colisieum BART station, the Airport and downtown Oakland from 12:35 AM and 4:30 AM.

Rental car shuttle buses operate between the terminals and the Rental Car Center at 10-minute frequencies and on a "on demand" basis between the hours of 1:30 AM and 4:30 AM.

At the time of the field review, Oakland Airport was undergoing terminal roadway and curbside improvements. When completed (estimate of Spring 2008), there will be four curbs to handle loading for personal vehicles and ground transportation connections. AirBART and taxis are located on Curb 2 which is expected to be renovated in early 2007; AC Transit and rental car shuttle are located on Curb 4.

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[1] AirBART Ridership 2005, Port of Oakland, December 2006.

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CORRECTIVE ACTIONS

WAYFINDING:
Construction at the airport terminals and roadways has resulted in a mixture of sign types (old vs. new) and temporary or incomplete signage at the terminals. In general, wayfinding signage is effective with good use of logos, international symbols and consistent colors. However, checklist comments suggest that there are some gaps in the directional signage, specifically related to the AC Transit and AirBART loading areas. Implementation of consistent, easy to read, easy to find, hierarchical information would facilitate passenger flow between airport terminal exits and transit services.

The following proposed wayfinding corrective actions would clarify Oakland Airport's transit connections. Note that these actions may already be included as part of terminal and roadway improvement plans currently under construction.

Identification of station or transit operator

- No corrective actions recommended

Moving around or entering or exiting the station

- Install signs at all decision points in the hub to direct passengers between the Airport, AirBART, and AC Transit bus boarding areas. While many of these signs exist, there are directional gaps particularly when directing to specific boarding areas (see checklist question #9, photos #1 - 7);

- Simplify signage at some locations by grouping vital connections (see checklist question #8; photo #8);

- The use of operator logos on temporary blue directional signs would improve ability to find AirBART and AC Transit services (checklist question #6; photos #9, 10, 11);

Identification of where to board or wait for transit

- Include more visible and prominent identification of AC Transit bus stops including logo (see checklist questions #17, 21; photo #12);

- AC Transit Line 50 uses the same stop for both eastbound and westbound buses. This information needs to be provided at the bus stop along with map and schedule; currently clarification of bus destination is only available on the front of the bus (see checklist questions #18, 20);

- Clarify boarding platform for AirBART; multiple signs with inconsistent arrows create confusion. It is likely that improved signage will be included in renovation of this boarding area on Curb 2 to begin in early 2007 (see checklist questions #17, 19, photos #13, 14).

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CUSTOMER INFORMATION:
Overall, customer information at OAK is generously provided and presented in a clear manner. Information counters (photo #15) and kiosks are described as "easy to find", providing schedules, and service information. Airport terminal maps are noted to be thorough and include information on ground transportation connections with the appropriate logos, as well as public and passenger services. However, there are areas where customer information could be improved. Customer information displays should be coordinated with wayfinding signage at key locations within the facility including the following customer information elements:

Regional Transit Information (RTIC)

The Oakland International Airport does not have a 511.org RTIC; instead it has adopted its own system to display transit information with appropriate ground transportation information (photos #16, 17).

- OAK's future installations of a regional transportation display with 511.org should include the following elements:
  1. The regional 511.org transit map; and
  2. Subregional or system map for local operators.

- Provide directional signage to the RTIC (see checklist question #31);

- Incorporate the RTIC installations with local transit information wherever possible (see checklist questions # 27-30);

Local Transit Information

- Local transit information would include:
  1. Subregional or system map for local operators (photo #18);
  2. Schedules and service hours;
  3. Fares and specific system information;
  4. Hub layout map (photo #19); and
  5. Local vicinity map.

- Although most of the above elements can be found within Oakland Airport, they are often not grouped together. Locate local transit information with RTIC installations wherever possible (see checklist questions #28-31);

- Replace old and outdated maps with current information including operator logos (see checklist question #6, 31).

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REAL-TIME SIGNAGE:

Existing Real-Time Signage

Currently, Oakland Airport only provides real time information for its arriving and departing flights.

Future Real-Time Signage Installations

The airport's real-time airline departure and arrival tracking system provides an excellent example of what could be done in the future for real-time transit information (Photos #). Real-time signage should be coordinated with the existing transit infrastructure, including but not limited to the following:

- AirBART and AC Transit real-time signage should be installed at Terminal 1 and 2 information booths (see checklist question #38; photo #)

- Real-time signage should also be considered for AirBART shelters (see checklist question # 38; photo #15)

- MTC has a tremendous opportunity to test real-time and 511.org information. There is ample space in the newly opened Terminal 2 to install monitors to displays real-time information for both AirBART and AC Transit.

- MTC staff should work with Airport staff to develop and test 511.org regional transit information.

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STATION PHOTOGRAPHS

1. Directional signage for arriving passengers near security area at Terminal 2. This is new signage installed with recent terminal renovation.

2. Directional signage leading to exits and baggage claim.

3. Signage at baggage claim. Consistent use of colors and arrows to reinforce a continuous directional sequence.

4. Directional signage leading to ground transportation.

5. Directional signage at exit.

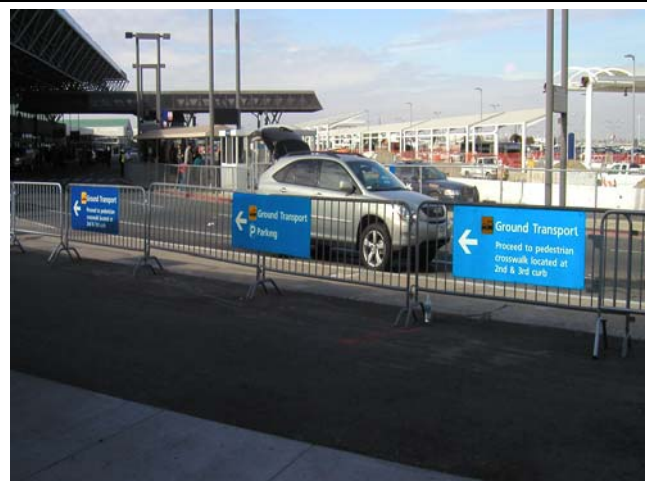6. Directional signage at exit.

7. Directional signage leading to curb loading areas. This signage could be more effective with use of operator logos.

8. Directional signage at exit by information booth. Note the excessive amount of information is confusing to the user.

9. Temporary signage. Could be improved with use of BART/AirBART logos.

10. Temporary blue directional signs to ground transportation. Note lack of operator logos.

11. Temporary directional signage used during construction

12. AC Transit Bus Stop sign lacks an identifying logo.

13. Additional arrows used to identify relocated AirBART boarding platform

14. Signage to relocated AirBART loading area. Excessive directional arrows make is more difficult to locate AirBART boarding area.

15. Information Booth in Terminal 2 provides BART, AC Transit maps and schedules

16. Hub map located at the information booth.

17. Detail of ground transportation featured on hub map.

18. Detail of hub map.

19. BART information provided at currently unused AirBART loading area.

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			Hub Review Checklist Summary
			WAYFINDING
Yes	No	N/A	
			Identification of station or transit operator
8			1. The hub is clearly identified, visible from surrounding roadways by vehicular and pedestrian traffic.
8			2. Entrances into the hub are clearly identified, visible from approaches by vehicular and pedestrian traffic.
7			3. Transit operators serving the hub are clearly identified at the entrances with their logo and name. • AirBART needs a Train icon with BART logo. • Need better AC Transit logo at Stop
4			4. Station identification reinforces information on printed maps and schedules.
2		1	5. Station name is identified on the entrance sign along with agency logo.
			Moving around or entering or exiting the station
Yes	No	N/A	
5	2		6. Agency logos are included with names on directional signs within the facility. • AC Transit logo on Terminal 2 Map is old and outdated
5	1		7. Turnstile level street exit directional signs also include connection agency names and logs.
6	1		8. Vital connections information is grouped together on signs. • BART signs should include a train icon • Need AC Transit and 511.org information
8			9. Connection directions are provided at each decision point and there are no gaps in the connection directional information flow. • Good overall but somewhat breaks down out to ground transportation platforms
7	1		10. Exiting directional signs list a hierarchy of the popular destinations and connecting services to reach these destinations.
4	1		11. Where connecting transit service is not within the station, clear directional signage (including walking distance) is provided to these services. All sign placement complies with 2004 ADAAG guidelines. • Signs lack walking distance
	3	2	12. In stations with multiple track/gate or train/ferry service, confirmation of agency, destination, and real-time departure is associated with those services. • Multiple platforms- some direction but also missing information while under construction.

7			**13.** Clear sightlines are maintained to signs and all sign placement complies with 2004 ADAAG guidelines.
5	2		**14.** Exiting connection information is color-coded to emphasize and make it easier to find directions and connections. • Good use of logos, information symbol, and consistent colors
8			**15.** Signs are legible with adequate message size appropriate for viewing distance, proper contrast ratios, and illumination levels.
7	1		**16.** Arrows are of consistent design and are bold in visual balance with text and are closely associated with their messages. • AirBART signs- 1) Arrows are pointing in the wrong direction, 2) Signs are not clear.
			Identification of where to board or wait for transit
Yes	No	N/A	
8			**17.** Transit boarding platforms are clearly and boldly identified. • AC Transit bus stops need operator logo • BART needs to add a train icon to its logo
2	4	1	**18.** Where a particular transit route utilizes different boarding points for opposite directions of travel, directional signage is provided to the different boarding point including platform route number, name, and route terminus (a place name). • AC Transit route 50 is not marked by route number or logo. This route also runs in different directions but one would only know it by reading the bus. • No directional signage, just headsign on bus • Remove some AirBART signs
1	4	1	**19.** At commuter rail, ferry terminals or bus stations, the boarding area identification number is large and bold with service agency, destination, number, and "real-time" departure is provided. • AirBART stop sign is slightly incorrect.
2	3	1	**20.** Schedule frequency and last departure information are provided at transit boarding platforms and are consistent with 2004 ADAAG guidelines.
3	5		**21.** Bus stop signs have agency logos large and bold. • No logos nor schedule information are present at the bus stop.
1	2	2	**22.** Bus stop signs have accessibility and parking restrictions as auxiliary signs below the basic bus stop signs.
3	1	2	**23.** Bus route identification on bus stop signs comply with 2004 ADAAG Guidelines – minimum 2" route number character height.
4			**24.** Bus stop sign faces are visible from each approach direction.
2	1	2	**25.** Bus shelters have associated bus stop signs which are consistent with the design guidelines described in this checklist.

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Yes	No	N/A	**CUSTOMER INFORMATION**
			Regional Transit Information (RTIC)
3	4	2	**26.** Transit information in Regional Transit Information Display Cases is accurate and easy to read. • No RTICs present.
1	6	1	**27.** Transit operator and route maps for the nine-county San Francisco Bay Area are posted in the Regional Transit Information Display Cases. • Needs an RTIC display case outside the airport with connecting information map at AirBART • Terminal 2 has new information center with BART information. 511.org brochures should be added.
			Local Transit Information
1	3	3	**28.** Hub specific information is provided in a case adjacent to the Regional Transit Information Display Case and at other critical locations at the hub. • Information desk has BART and AC Brochures
4	3	1	**29.** Hub layout maps are provided in the hub information display case. • Good hub layout at information center • Hub layout maps may not be needed because Airport wayfinding signs provide direction to baggage claim. • Need train icon next to BART logo
	7	2	**30.** Map of hub vicinity with landmarks and attractions is posted in the hub information case.
5	2	1	**31.** Posted transit information (i.e. maps, schedules) is well maintained, accurate and easy to find. • The information kiosk may consider changing the "?" to an international "I" symbol • At information center, 511 brochures are needed • Information at information desk is good and easy to find
1	5		**32.** Schedules, fare, transfer information and hub layout maps are located near bus stops and loading platforms. • BART map near AirBART shuttle stop
5	2		**33.** Printed schedules and maps distributed at the hub contain accurate information and are consistent with the information provided in the Regional Transit Information Display Cases. • Schedules may not be necessary at AirBART since it runs every 10 minutes as shown on stop

Yes	No	N/A	**REAL-TIME SIGNAGE**
			Existing Real-Time Signage
	6		**34.** Real-time signage is provided at the hub.
			35. Location of signs (indicate on station diagram). • No transit real time • Real-Time only available for airplanes
			36. Description and photo of signage types.
			37. Identification of transit services included on real-time signage (Include operator and mode).
			Future Real-Time Signage Installations
			38. Describe location(s) for future real-time signage locations (indicate on station diagram). Refer to Appendix A Real-Time Technology Guidelines page A-24 • Add real-time AirBART and AC Transit information in new AirTrain terminal entrance • Information booths Terminal 1 and 2 • Service is frequent enough for AirBART. The only real-time that would be useful is at loading platforms. • Consider putting real-time inside AirBART shelters
			39. Describe transit services that would be included in real-time signage displays. Refer to Appendix A pages A-24-26. • Add 511.org information mal at new terminal • BART and AC Transit